

WHAT IS CLAIMED IS:

1. A method of adjustment of the entrance dose of a radiology apparatus of the type containing a means of X-ray beam emission, a means of detection of the X-ray beam after it has crossed an object to be visualized, and a means of visualization connected to the means of detection, in which the distance between the means of emission and the object is estimated and, when the distance between the means of emission and the object or the distance between the means of emission and the means of detection varies, the entrance dose is modified according to said distances in order to maintain an appreciably constant equivalent dose in the plane containing the object, the distance between the means of emission and the means of detection being known.

2. The method according to claim 1, in which the distance between the means of emission and a detail of interest of the object is estimated.

3. The method according to claim 1, in which the entrance dose is modified according to the ratio of the square of the distance between the means of emission and the object and to the square of the distance between the means of emission and the means of detection.

4. The method according to claim 2, in which the entrance dose is modified according to the ratio of the square of the distance between the means of emission and the object and to the square of the distance between the means of emission and the means of detection.

5. The method according to claim 1, in which the distance between the means of emission and the object is estimated by approximation of the distance between the object and a table supporting the object, taking into account the object's morphology.

6. The method according to claim 2, in which the distance between the means of emission and the object is estimated by approximation of the distance between the object and a table supporting the object, taking into account the object's morphology.

5 7. The method according to claim 3, in which the distance between the means of emission and the object is estimated by approximation of the distance between the object and a table supporting the object, taking into account the object's morphology.

10 8. The method according to claim 4, in which the distance between the means of emission and the object is estimated by approximation of the distance between the object and a table supporting the object, taking into account the object's morphology.

15 9. The method according to claim 1, in which the distance between the means of emission and the object is estimated by considering the object to be placed roughly on an axis of rotation of the radiology apparatus.

10 10. The method according to claim 2, in which the distance between the means of emission and the object is estimated by considering the object to be placed roughly on an axis of rotation of the radiology apparatus.

20 11. The method according to claim 3, in which the distance between the means of emission and the object is estimated by considering the object to be placed roughly on an axis of rotation of the radiology apparatus.

25 12. The method according to claim 1, in which the radiology apparatus including a diaphragm situated on an optical path and making it possible to adjust the attenuation of the quantity of light crossing it, the opening of the diaphragm is controlled to regulate the gain, so that an appreciably constant equivalent dose in the plane containing the object is maintained.

13. The method according to claim 2, in which the radiology apparatus including a diaphragm situated on an optical path and making it possible to adjust the attenuation of the quantity of light crossing it, the opening of the diaphragm is controlled to regulate the gain, so that an appreciably constant equivalent dose in the plane containing the object is maintained.

14. The method according to claim 3, in which the radiology apparatus including a diaphragm situated on an optical path and making it possible to adjust the attenuation of the quantity of light crossing it, the opening of the diaphragm is controlled to regulate the gain, so that an appreciably constant equivalent dose in the plane containing the object is maintained.

15. The method according to claim 4, in which the radiology apparatus including a diaphragm situated on an optical path and making it possible to adjust the attenuation of the quantity of light crossing it, the opening of the diaphragm is controlled to regulate the gain, so that an appreciably constant equivalent dose in the plane containing the object is maintained.

16. The method according to claim 5, in which the radiology apparatus including a diaphragm situated on an optical path and making it possible to adjust the attenuation of the quantity of light crossing it, the opening of the diaphragm is controlled to regulate the gain, so that an appreciably constant equivalent dose in the plane containing the object is maintained.

17. The method according to claim 6, in which the radiology apparatus including a diaphragm situated on an optical path and making it possible to adjust the attenuation of the quantity of light crossing it, the opening of the diaphragm is controlled to regulate the gain, so that an appreciably constant equivalent dose in the plane containing the object is maintained.

18. The method according to claim 7, in which the radiology apparatus including a diaphragm situated on an optical path and making it

possible to adjust the attenuation of the quantity of light crossing it, the opening of the diaphragm is controlled to regulate the gain, so that an appreciably constant equivalent dose in the plane containing the object is maintained.

5 19. The method according to claim 8, in which the radiology apparatus including a diaphragm situated on an optical path and making it possible to adjust the attenuation of the quantity of light crossing it, the opening of the diaphragm is controlled to regulate the gain, so that an appreciably constant equivalent dose in the plane containing the object is maintained.

10 20. The method according to claim 9, in which the radiology apparatus including a diaphragm situated on an optical path and making it possible to adjust the attenuation of the quantity of light crossing it, the opening of the diaphragm is controlled to regulate the gain, so that an appreciably constant equivalent dose in the plane containing the object is maintained.

15 21. The method according to claim 10, in which the radiology apparatus including a diaphragm situated on an optical path and making it possible to adjust the attenuation of the quantity of light crossing it, the opening of the diaphragm is controlled to regulate the gain, so that an appreciably constant equivalent dose in the plane containing the object is maintained.

20 22. The method according to claim 11, in which the radiology apparatus including a diaphragm situated on an optical path and making it possible to adjust the attenuation of the quantity of light crossing it, the opening of the diaphragm is controlled to regulate the gain, so that an appreciably constant equivalent dose in the plane containing the object is maintained.

25 23. The method according to claim 1, in which knowing the real size of the object or of a material introduced in the object for medical needs, an image processing is carried out to recognize said object in the different images;

the size of said object is measured and the ratio between the real size and the measured size is calculated in order to deduce its real enlargement factor.

24. The method according to claim 2, in which knowing the real size of the object or of a material introduced in the object for medical needs, an
5 image processing is carried out to recognize said object in the different images, the size of said object is measured and the ratio between the real size and the measured size is calculated in order to deduce its real enlargement factor.

25. The method according to claim 3, in which knowing the real size of the object or of a material introduced in the object for medical needs, an
10 image processing is carried out to recognize said object in the different images, the size of said object is measured and the ratio between the real size and the measured size is calculated in order to deduce its real enlargement factor.

26. The method according to claim 4, in which knowing the real size of the object or of a material introduced in the object for medical needs, an
15 image processing is carried out to recognize said object in the different images, the size of said object is measured and the ratio between the real size and the measured size is calculated in order to deduce its real enlargement factor.

27. The method according to claim 5, in which knowing the real size of the object or of a material introduced in the object for medical needs, an
20 image processing is carried out to recognize said object in the different images, the size of said object is measured and the ratio between the real size and the measured size is calculated in order to deduce its real enlargement factor.

28. The method according to claim 6, in which knowing the real size of the object or of a material introduced in the object for medical needs, an
25 image processing is carried out to recognize said object in the different images, the size of said object is measured and the ratio between the real size and the measured size is calculated in order to deduce its real enlargement factor.

29. The method according to claim 7, in which knowing the real size of the object or of a material introduced in the object for medical needs, an image processing is carried out to recognize said object in the different images, the size of said object is measured and the ratio between the real size and the measured size is calculated in order to deduce its real enlargement factor.

30. The method according to claim 8, in which knowing the real size of the object or of a material introduced in the object for medical needs, an image processing is carried out to recognize said object in the different images, the size of said object is measured and the ratio between the real size and the measured size is calculated in order to deduce its real enlargement factor.

31. The method according to claim 9, in which knowing the real size of the object or of a material introduced in the object for medical needs, an image processing is carried out to recognize said object in the different images, the size of said object is measured and the ratio between the real size and the measured size is calculated in order to deduce its real enlargement factor.

32. The method according to claim 10, in which knowing the real size of the object or of a material introduced in the object for medical needs, an image processing is carried out to recognize said object in the different images, the size of said object is measured and the ratio between the real size and the measured size is calculated in order to deduce its real enlargement factor.

33. The method according to claim 11, in which knowing the real size of the object or of a material introduced in the object for medical needs, an image processing is carried out to recognize said object in the different images, the size of said object is measured and the ratio between the real size and the measured size is calculated in order to deduce its real enlargement factor.

34. The method according to claim 12, in which knowing the real size of the object or of a material introduced in the object for medical needs, an

image processing is carried out to recognize said object in the different images, the size of said object is measured and the ratio between the real size and the measured size is calculated in order to deduce its real enlargement factor.

35. Radiology apparatus comprising:

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means for emission of an X-ray beam;

means of detection of the X-ray beam after it has crossed an object to be visualized;

means for visualization connected to the means of detection;

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wherein a first distance between the means for emission and the object is estimated;

wherein a second distance between the means for emission and the means for detection is known;

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wherein when a third distance between the means for emission and the object or a fourth distance between the means for emission and the means for detection varies, an entrance dose of the X-ray beam to the means for detection is modified according to the third or fourth distance to maintain an appreciably constant equivalent dose in a plane containing the object.